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*SF City Planning*

I-280 CONCEPT PROGRAM

CITY STAFF RECOMMENDATION

FULL REPORT

City and County of San Francisco

June, 1985

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city staff  
1985.

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## PREFACE

This recommendation has been developed in conjunction with the I-280 Transfer Concept Program Draft Environmental Impact Report and Summary of Comments and Responses. This document does not reproduce the maps, tables, charts, and others graphics presented in the EIR. Consequently, use of the Draft EIR document (published September 28, 1984) would prove a helpful reference when reading this report.





## INTRODUCTION

In 1979, the City and County of San Francisco adopted the Northeast Waterfront Plan as part of the City's General Plan. In 1980, San Francisco took action to withdraw from the Federal Interstate System an uncompleted segment of Interstate 280 and to seek to utilize the federal funds made available through the withdrawal on substitute highway and transit projects in support of the land use and economic development set forth in the Northeast Waterfront Plan. From 1981 to late 1984, San Francisco and other governments undertook a study which examined a series of proposed transportation projects that had been identified in the Northeast Waterfront Plan. This study led to the completion of a Draft Environmental Impact Report (DEIR), a hearing on that Report in November, 1984, and the certification of a Final Environmental Impact Report (FEIR) in May, 1985. Completion of the I-280 study and certification of the FEIR by the San Francisco City Planning Commission sets the stage for a set of important decisions by the City and County of San Francisco which can lead directly to the implementation of certain of the transportation projects studied.

This document presents the consensus view of the five City departments involved in the I-280 Transfer Concept Program: Department of Public Works; City Planning Department; Port of San Francisco; Public Utilities Commission; and the Redevelopment Agency. This report represents a review and proposal on the I-280 study, and attempts to respond to the established policies of the San Francisco Board of Supervisors on specific projects which have been examined in the study. The purposes of this report are the following:

- o To provide a summary of the I-280 project history.
- o To provide a summary of the procedural and regulatory considerations involved in the I-280 effort.
- o To set forth a city staff recommendation on the transportation projects to be implemented based upon the I-280 study.
- o To set forth a City staff recommendation on the procedural steps associated with the implementation of the I-280 projects.
- o To set forth a City staff recommendation on the proposed funding strategy associated with that recommended set of projects.



## BACKGROUND SUMMARY

In February, 1980, the San Francisco Board of Supervisors took formal action requesting that the uncompleted segment of I-280 in the City be withdrawn from the Federal Aid Interstate System. This request was agreed to by the Metropolitan Transportation Commission (MTC) and in turn submitted to the federal government by the Governor in late 1980. The withdrawal request was approved by the Urban Mass Transportation Administration (UMTA) and the Federal Highway Administration (FHWA) in January, 1981, in accordance with federal laws and regulations. These actions provided the opportunity for San Francisco to utilize the federal highway funds which would have been provided for the I-280 segment on substitute highway or transit projects.

Following approval of the I-280 withdrawal by the federal government, an agreement was reached and a process established for determining how the federal funds would be expended. The City, CALTRANS, and the MTC joined together in the I-280 Transfer Concept Program study, which would examine the transportation and environmental impacts of a number of highway and transit projects, most of which were derived from the Northeast Waterfront Plan. The three agencies agreed to several basic elements of the proposed study, including:

- o The lengthy list of potential highway and transit projects identified earlier as part of the withdrawal decision would be studied together in a single study, rather than individually, because of their cumulative impact and inter-relationships.
- o The study, aimed at producing a comprehensive document analyzing the transportation and environmental affects of different combinations of the identified projects, would be directed by a Policy Control Committee made up of representatives from the three agencies, managed on a daily basis by CALTRANS, and employ a consultant to accomplish the work.
- o At the conclusion of the study, an effort would be made to determine which of the projects studied should be implemented.

The consultant team began work in late 1981 with the purpose of producing a Draft EIR/EIS to satisfy both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) laws. During the course of the study, it was determined that the study would not meet the needs of the NEPA. Consequently, the final report is not represented to be an EIS but rather (only) an EIR. Nonetheless, the report which has been developed as an EIR has standing with the federal agencies

The first of these is the fact that the human race is not a homogeneous mass, but is divided into many distinct groups, each with its own characteristics. These groups are known as races, and are distinguished by their physical and mental qualities. The second fact is that these races have not remained stationary, but have changed and developed over time. The third fact is that the human race is a social animal, and that its development is influenced by its environment and its social organization.

The study of the human race is a complex task, and one that requires the cooperation of many different sciences. It is not only a matter of collecting facts, but of interpreting them in the light of our knowledge of the human mind and of the laws of nature. It is a task that is of great importance to the human race, for it is only by understanding ourselves that we can hope to improve our condition and to secure a better future for ourselves and for our children.

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involved, and is considered to be a "systems planning" document. This means that it will be respected by the FHWA and UMTA as a study which can provide the basis for deciding which projects are to be implemented and which projects will be the recipients of the available federal withdrawal funds.

The I-280 FEIR which has emerged from the three-year study effort is somewhat unique in its approach to the projects. The document sets forth the analyses of eight alternatives. However, unlike many EIRs, each of the alternatives studied in the I-280 work is not a single project but rather a combination or "package" of a number of transportation projects which are designed to function together in an efficient manner. Consequently, in any given alternative, certain projects are included or deleted, or the design is varied to examine the relative changes in transportation service and related environmental impacts. Overall, therefore, the purpose of the study is to produce sufficient information on which to reach a policy decision on which "package" of transportation improvements should be implemented. That is the nature of the decision before the City of San Francisco and in turn, the MTC and CALTRANS.





## NEXT STEPS

The recommendation set forth in this report is aimed at providing the substance for the first in a series of policy decisions by San Francisco, MTC, CALTRANS, and the federal agencies involved, which will allow selected transportation projects to proceed toward implementation and to provide the basis for decisions on the allocation of the available withdrawal funds. The federal law and regulations pertaining to the development of Interstate withdrawal and substitution projects place primary responsibility for the selection of such projects with local government. All projects to be implemented must have the support not only of the local jurisdiction in which they are to be located but also of the Metropolitan Planning Organization (MPO), which is the MTC, and the Office of the Governor. Consequently, formal approval of this recommendation by the Mayor and San Francisco Board of Supervisors must obtain the subsequent approval of the Metropolitan Transportation Commission and the State of California. That approval is not limited to the selection of projects to be implemented and which will receive some share of the federal withdrawal funds, but also includes approval of the specific grant applications for the implementation steps as well as continued cooperation through the implementation phases. Those steps are generally described in the following manner.

- o Adoption by the San Francisco Board of Supervisors of a resolution indicating the package of projects which the City wishes to move forward toward implementation, based upon the I-280 FEIR.
- o Adoption by the Board of a proposed allocation of the available I-280 federal assistance to the selected projects. This would represent an initial decision on which projects will receive what amounts of Interstate withdrawal assistance. This allocation can be modified in the years ahead, with MTC and State concurrence, but is no less important in the short term with respect to federal guidelines and the ability of the I-280 projects to obtain needed federal funds.
- o Permission from the Board for initial grant applications to be submitted to the federal government for the preliminary engineering and NEPA work on the selected projects.
- o Concurrence by the MTC in the proposed list of projects, the associated proposed allocations of federal assistance, and approval of grant applications.





- o Approval of the project list, proposed I-280 funding allocations, and associated grant applications by the Office of the Governor, or the Governor's designee (CALTRANS).
- o Submission of the above information and formal actions to the FHWA and the UMTA.
- o Approval by the FHWA and the UMTA of the actions regarding selected projects and funding, and specific approval of the grant applications which will constitute the initial phase of project implementation.
- o Initiation by the City, with CALTRANS' assistance, of project preliminary engineering and environmental documentation (NEPA) per federal regulations and procedures.



## POLICY PERSPECTIVE

Before setting forth the I-280 recommendation, it is important to place the I-280 study and the pending decision in the framework of past San Francisco Board actions, as well as pending decisions and related actions. The City and County of San Francisco, acting through its Commissions and the Board, has during the past decade taken various actions which not only directed the withdrawal of Interstate 280 from the federal system, but which also provided both the framework and direction for the study now concluding and the basis for the City staff recommendation. A summary of the more important of those actions includes the following.

- o The Northeast Waterfront Survey and planning work was initiated by Board action (Resolution 141-77) in February, 1977. This led to the development and adoption of the Northeast Waterfront Plan, which is the basic land use plan and development framework in which many of the I-280 substitute projects have been studied.
- o Following recommendations from the Public Utilities Commission (PUC), the Board of Supervisors, in March, 1978, directed that the PUC take steps to accomplish a Muni Metro turnaround loop and rail extension southward to the Southern Pacific commute terminal at 4th and Townsend (Resolution 231-78).
- o In February, 1980, the Board of Supervisors acted (Resolution 152-80) to formally request withdrawal of the I-280 segment from the federal system, and in so doing, indicated that a number of projects should be studied as possible recipients of the funding to be made available by the withdrawal. These projects included: reconstruction of the Embarcadero Roadway; removal of the Embarcadero Freeway; development of rail transit along the waterfront; and development of other related highway, transit, pedestrian, and parking projects.
- o Following actions by the San Francisco Redevelopment Agency, the Board designated and approved plans for the Rincon Point-South Beach Redevelopment Project Area, in January, 1981 (Resolution 14-81). This Plan has provided the framework for the I-280 substitute projects in the waterfront area south of the Bay Bridge.
- o The Board, in February, 1983, further reinforced the previous direction on a waterfront rail project by establishing a policy on the future of Market Street, including the development of a rail transit facility which would connect to the proposed waterfront E Line, then being examined in the I-280 Concept Program study (Resolution 160-83).



In addition to these policy actions, the City has taken or is involved in decisions on three related matters which are pertinent to the I-280 study and recommendation.

First, in 1984, with the concurrence of the UMTA, the PUC and Board took actions which effectively deleted the proposed Muni Metro turnaround project from the I-280 study and process. Recognizing the importance of progress on the turnaround project and concluding that this project could proceed in advance of the other I-280 projects, a grant application for preliminary engineering and related NEPA documentation was submitted through the MTC and Governor to the UMTA. That application for assistance was approved in the fall of 1984, the PUC selected a consultant, and the turnaround project engineering phase was initiated in early 1985. It is estimated that if all goes according to schedule, the turnaround project will be completed in 1990.

Second, in 1984, the Board passed a resolution supporting the concept of a project which would allow a subway extension of the Southern Pacific commute service from its current terminus at 4th and Townsend to a new terminus at the Transbay Terminal. Shortly thereafter, the California State Legislature, by SCR 74, directed the MTC to undertake a study examining alternative methods of improving transit service on the Peninsula, inclusive of an evaluation of the proposed SP commute extension and the proposed Muni Metro surface extension (from the Muni subway) to 4th and Townsend. The SCR 74 mandated study, which recommends the Muni extension, will be the subject of MTC consideration during the summer of 1985.

Third, the City began negotiations on the contracts associated with the proposed Mission Bay Development Project, sponsored by the Santa Fe Southern Pacific Land Company. This 195-acre development project is integral to, and of necessity must be planned in conjunction with, several of the I-280 projects, including the I-280 ramp resolution in the vicinity of 6th and 5th Streets, the local arterial improvements between the I-280 ramp modifications and The Embarcadero roadway (at 2nd Street), and the extension of Muni tracks through this corridor to accommodate the proposed Muni Metro Extension and E Line. The initiation of implementation steps on the I-280 projects in this corridor in conjunction with the development of a Master Plan for the Mission Bay project represents a unique opportunity to merge public and private investments in land use development and transportation.

It is the view of City staff that the current statuses of these matters do not represent problems or obstacles to the I-280 decision-making process, and that the I-280 implementation process is either compatible with, or can accommodate the results of, decisions emerging from these related areas of concern.





## RECOMMENDATION - PREFERRED PROJECTS

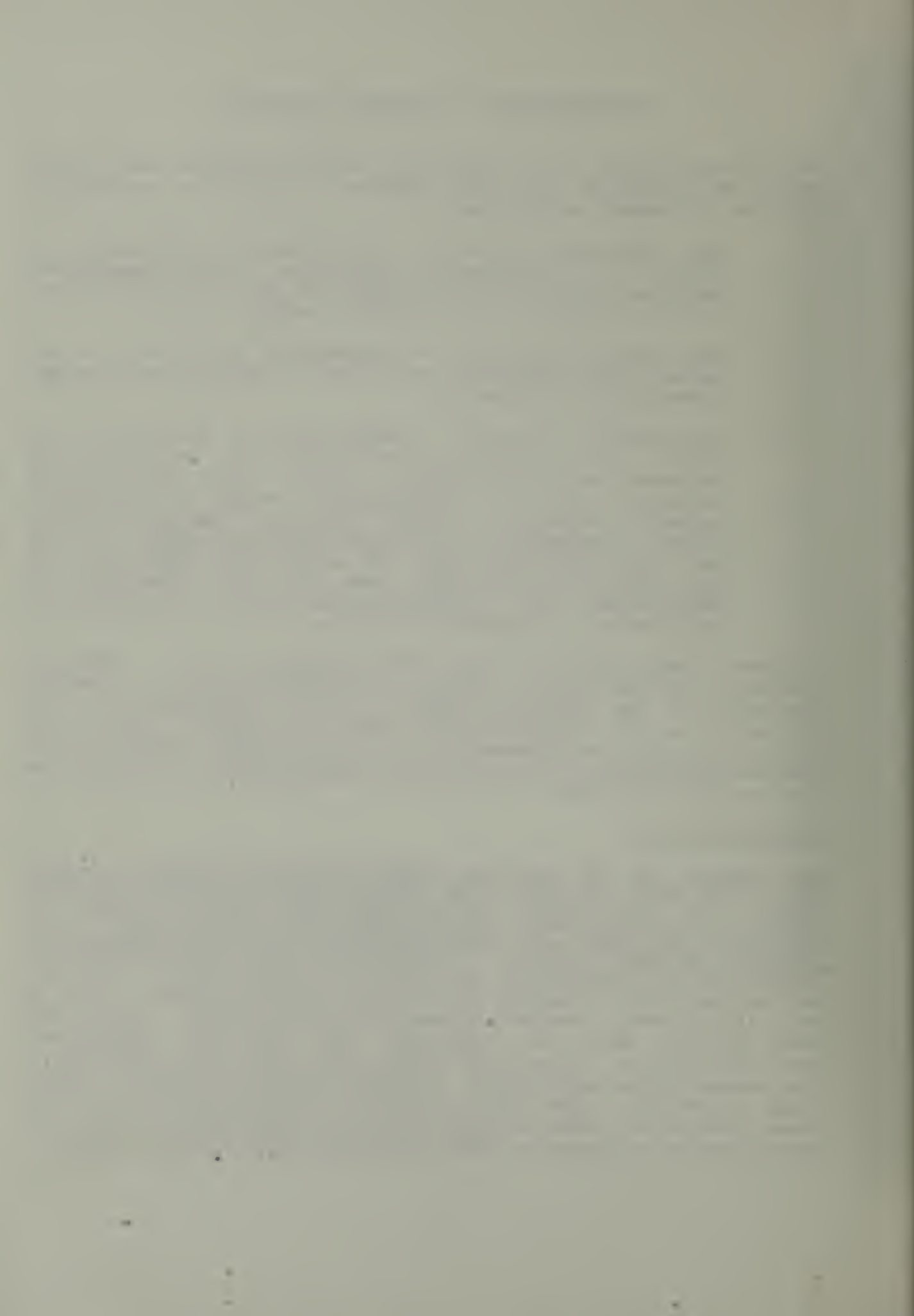
The recommendation by the joint City staff technical and policy groups on a package of I-280 Preferred Projects is associated with the following assumptions.

- o The Preferred Projects recommendation represents an effort to be technically responsive to the established policies of the City and County of San Francisco having to do with land use and transportation.
- o The Preferred Projects recommendation is believed to be technically responsible in terms of transit and highway planning and engineering.
- o The Preferred Projects recommendation is believed to be within the financial capability of existing and forecast levels of federal, state, local, and private financing over a construction period of nearly a decade. However, if the initial (February, 1985) budget proposals of the Reagan Administration for the UMTA are realized, then the ability to implement the full package of projects over the same time-frame is jeopardized, and a re-evaluation would be necessitated with respect to funding priorities.

A summary description of each project element in the Preferred Project recommendation follows, together with a summary discussion of the reasoning applied to the recommendation. The projects are not listed in any order of priority since, in fact, they are inter-dependent to a substantial extent. The recommended projects are effectively represented as Alternative IV-A in the I-280 EIR.

### I-280 Touchdown

The removal of the existing I-280 elevated structure between Third and Sixth Streets, the construction of new on and off ramps, and improvements along King and Berry Streets, as generally set forth in Alternative IV-A in the FEIR, is a Preferred Project element. This project would also require the removal of the east-bound off-ramp at Fourth Street. New off and on ramps would connect the elevated I-280 freeway to Berry and King Streets immediately west of Fifth Street. Berry and King Streets would be improved and possibly re-aligned, providing access to and from I-280 and connecting directly to the reconstructed Embarcadero roadway at Second Street. Access ramps connecting I-280 to Sixth Street would be retained. The final design of these modifications and improvements would be determined in conjunction with the Mission Bay planning effort.





The existing elevated I-280 structure between Sixth and Third Streets is not used and does not have to be retained, given the withdrawal of the I-280 segment. Built on air-rights, the structure blocks the productive development of the land beneath the structure. Additionally, current limited access to and from I-280 does not facilitate efficient traffic flow on local streets, requiring a substantial proportion of the I-280 traffic to converge at the intersection of Sixth and Brannan.

The Preferred Project would provide for more efficient distribution of I-280 traffic to and from major north-south arterials (Sixth, Fourth, Third) and, in conjunction with the King/Berry improvements, provide efficient traffic movement to and from the reconstructed Embarcadero roadway. This, in turn, would remove traffic moving to and from locations in the northeast waterfront area from the local streets in the south-of-Market and Rincon Hill areas, and also provide excellent transportation service to and from the Mission Bay development area. Consequently, the Preferred Project for the I-280 Touchdown and related street improvements will result in greater land use utility, more efficient use of local streets, and more effective use of the I-280 facility.

#### Embarcadero Roadway

The substantial reconstruction of The Embarcadero roadway from Bay Street on the north to Second Street on the south, as set forth in Alternative IV-A of the I-280 FEIR, is a Preferred Project element. The Embarcadero roadway would be reconstructed as a four-lane boulevard its entire length, with additional lanes in various segments, turning refuges, improved signalization, and a landscaped right-of-way for a Muni light rail line and the re-aligned Beltline Railway.

The reconstruction of The Embarcadero roadway, both functionally and aesthetically, is the primary transportation element in the Northeast Waterfront Plan, and, in turn, the I-280 study, since it:

- o Provides the major transportation facility intended to serve the entire waterfront, from the China Basin area to the commercial areas in the vicinity of Pier 39.
- o Provides the alignment and right-of-way for the proposed Muni light rail improvements which will serve the length of the waterfront and connect the waterfront area with other parts of downtown, the City's neighborhoods, and the regional transportation system.
- o Provides the transportation capacity and efficiency needed if other elements in the Preferred Projects package are to perform successfully, including the



removal and replacement of both the Embarcadero Freeway and the I-280 structure.

- o Provides an aesthetic design treatment giving continuity to the future redevelopment of the City's waterfront, including through its realignment, the creation of a new waterfront park adjacent to Rincon Hill.

The vision of a revitalized San Francisco waterfront needs not only a transportation system which adequately serves the needs generated by such revitalization, but a system which is compatible in terms of scale and design. The Preferred Project for The Embarcadero roadway is such a project. The proposed Embarcadero boulevard is not intended to principally serve trips passing through the Waterfront area. Instead, it is intended to efficiently serve trips which have at least one origin or destination in the waterfront area, while at the same time not making the area inhospitable to the increasing numbers of people who will live, work, and play in this unique area of the City.

The first phase of The Embarcadero project - preliminary engineering and NEPA work - will allow, in conjunction with other projects, a refinement of the boulevard design. The number of lanes required in various segments, principally north of the Bay Bridge, will be determined, and possible design modifications (such as the depression for the roadway in the vicinity of the Ferry Building) can be examined. However, based upon the I-280 FEIR, The Embarcadero roadway project generally described in Alternative IV-A appears to achieve the proper balance of providing for traffic, transit, pedestrian, and urban design improvements, and is highly recommended.

#### Embarcadero Freeway

It is not possible to discuss the Preferred Project element for the treatment of the Embarcadero Freeway without discussing at the same time the Embarcadero replacement ramps and the proposed reconstructed Embarcadero roadway. Both are integral to the recommendation, which is the removal of a portion of the Embarcadero Freeway.

It is important to recognize, in broad and historic terms, what the Embarcadero Freeway is, and what it is not. It is, in fact, an incomplete segment, a remnant of a discarded concept of transportation planning in San Francisco. In that earlier concept the Embarcadero Freeway would have continued as an elevated structure along the City's waterfront, eventually connecting directly to the Golden Gate Bridge. In that concept, the Embarcadero Freeway would have principally served





trips passing through the City, and the grade separation created by its elevated structure would have facilitated that traffic movement. The existing segment of the Embarcadero Freeway does not serve that original objective.

Instead, the Embarcadero Freeway serves as an elongated system of on and off ramps for I-80 traffic moving across the Bay Bridge or on the Peninsula. Since the Embarcadero Freeway ramps touch down at only two points, traffic is consequently concentrated at those two points - Broadway and Washington/Clay. Traffic utilizing these on-off ramps then must use local streets as the collection and distribution system in the City. Streets such as Broadway and Washington/Clay move traffic to and from the west, and streets such as Battery and Sansome move traffic to and from the north and south as well as to and from waterfront locations to the east.

The Preferred Project element, described in Alternative IV-A in the FEIR, would remove the elevated segment of the Embarcadero Freeway from Broadway to approximately Fremont, and construct new off/on ramps descending to grade near Folsom, Howard, and the new Embarcadero roadway. The new ramps would link I-80 traffic directly with the improved Embarcadero roadway which would then serve as the collector-distributor of traffic throughout the northern part of the waterfront. More direct access to The Embarcadero south would also be provided by this modification. Improved signalization and turning bays along The Embarcadero roadway would facilitate the distribution of traffic to and from such streets such as Washington, Broadway, Union, and Lombard, and remove some traffic from Battery, Sansome, and other streets.

As documented in the FEIR, this Preferred Project would result in some increased surface street congestion during the peak travel hours, and slightly longer travel times for certain automobile trips. However, since the proposed project does not affect the capacity of the Bay Bridge or I-80 south, and furthermore, does not affect the number of lanes currently servicing Embarcadero Freeway access to these two corridors (one lane in each direction), the forecast congestion increases are almost solely related to the shifting of peak hour traffic queues, which currently move slowly on the elevated Embarcadero, to surface streets.

It is apparent that the accomplishment of the project level EIS, in the engineering phase of the Embarcadero Freeway project, will provide an opportunity for further exploration of a variety of possible mitigation measures aimed at diminishing the forecast levels of surface street congestion. Responses to the DEIR by various groups and individuals have been helpful in focusing on a number of such measures. However, in all cases,



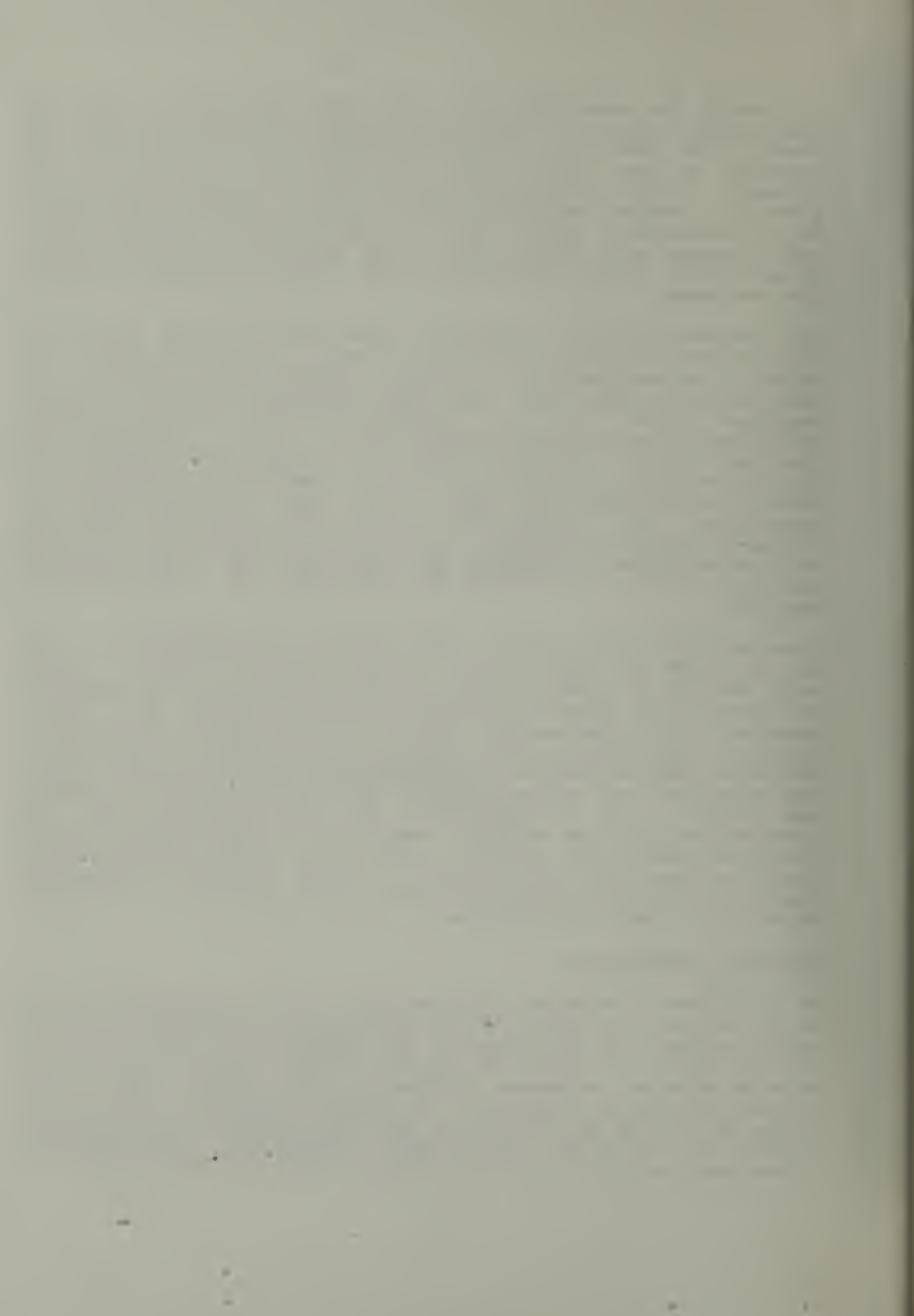
it should be understood that for those seeking to use the Embarcadero Freeway as the access route to the Bridge and I-80 south, the peak hour congestion now experienced will not diminish in the future, with or without the removal of the freeway. Further examination of mitigation measures should be aimed at reaching determinations of which measures will assist in facilitating a smooth flow of vehicles onto the new ramps and, perhaps more importantly, seek methods of insuring that local traffic is not disrupted by the traffic seeking to access the new ramps.

The recommendation to remove the Embarcadero Freeway structure and replace it with more modest ramps is not, it should be noted, a recommendation of a solely transportation nature. The San Francisco waterfront, like many commercial harbors in other American cities, is in a transition stage. The Northeast Waterfront Plan recognizes and plans for this transition from what was once a working harbor to a future that includes a variety of uses, including offices, commercial, housing, and some limited maritime uses. The Port of San Francisco recognizes this transition also, as evidenced by its concentration on developing a working port further to the south and undertaking redevelopment projects on the northern perimeter, such as the Ferry Building, Pier 39, and small boat marinas.

Like many American cities, San Francisco's waterfront is now cut off from the rest of the City by a large freeway. Unlike many American cities, however, in San Francisco it is possible to remove this freeway and substantially mitigate the traffic impacts. With the accomplishment of the proposed Embarcadero boulevard improvement, the proposed Muni E and F Line trolley projects, and the related landscaping and pedestrian amenities, San Francisco has an opportunity which few other U.S. cities can claim - the revitalization of its waterfront and its integration with the adjacent downtown and city neighborhoods. Only the Embarcadero Freeway looms as a visual and physical intrusion upon this opportunity. It is strongly recommended that it be removed and the vision set forth in the Northeast Waterfront Plan fully realized.

#### Muni Metro Extension

At this time, preliminary engineering and NEPA documentation is being prepared on the proposed Muni Metro turnaround project, to be located east and south of the Embarcadero subway station, in the general vicinity of Justin Herman Plaza, Steuart and Mission Streets. Although studied in the I-280 FEIR work, this project is moving forward in a separate process. In addition to accomplishing the efficiency and capacity improvements badly needed in the Muni Metro subway operation, this proposed turnaround facility will facilitate an extension of the Muni





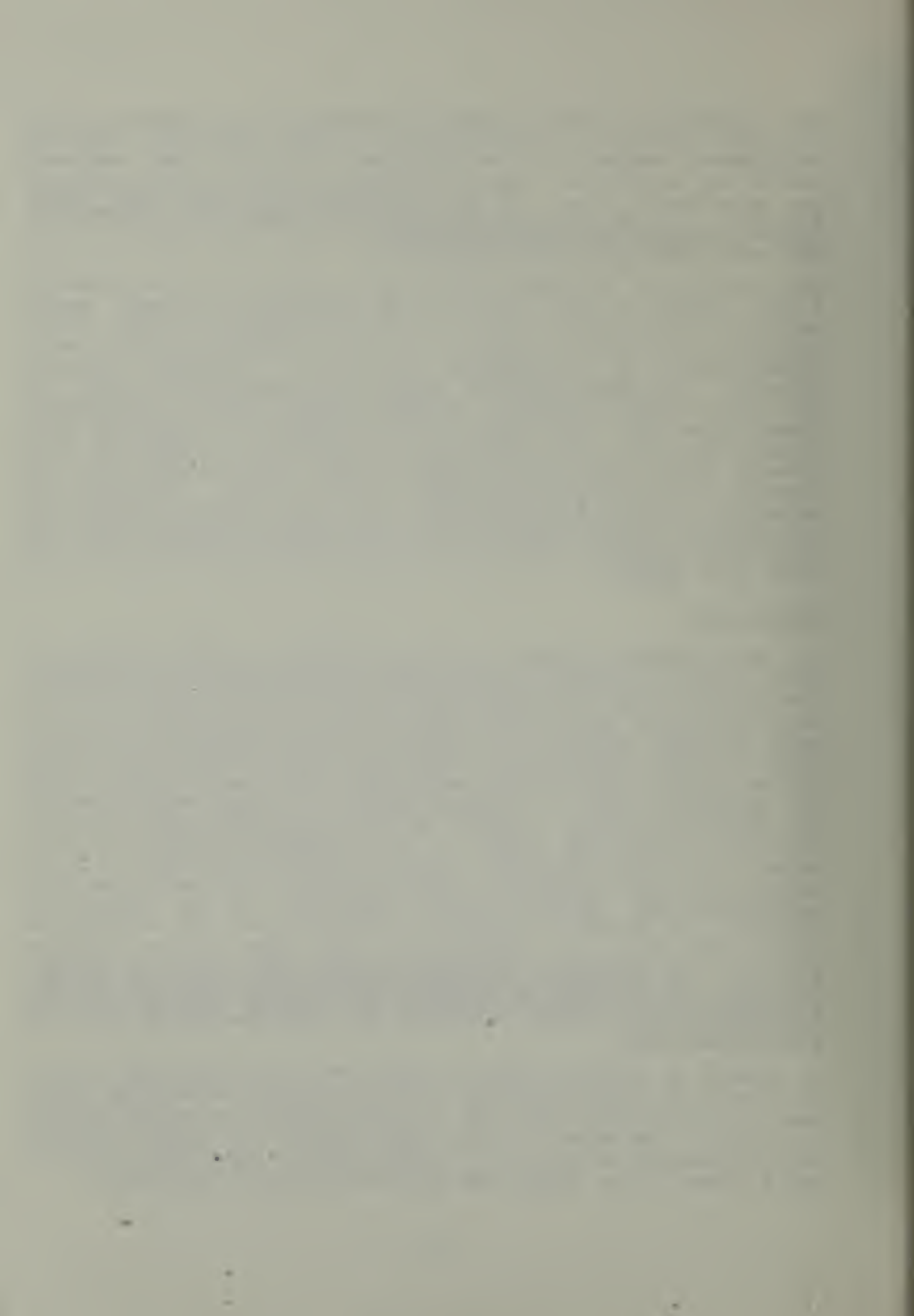
Metro service to surface operation south of its location. This will then allow an extension of the tracks along the improved Embarcadero Roadway to the King/Berry corridor and westward toward the current SP commute station and the proposed Mission Bay development area. It is recommended that the Muni Metro Extension, as generally described in Alternative IV-A in the FEIR, be a Preferred Project element.

This light rail extension which, when linked with the proposed E Line tracks to the north on The Embarcadero roadway, would provide for a rail service which encompasses the entire northeast waterfront area, is a fairly modest project when accomplished in conjunction with the proposed highway projects. It would provide direct rail service between the Muni Metro subway operation on Market Street and the developing areas along the bay shore south of Market, as well as the Mission Bay area. In addition, it would be an important link between these areas and regional transit facilities - the SP commute to the south, and BART to the north. Finally, the extension of Muni Metro service would mean direct light rail connections between Rincon Hill, South Beach, Mission Bay and the city's neighborhoods to the west already served by the Muni light rail system.

#### Muni E Line

The major transit project in the I-280 FEIR is the proposed E Line, which in terms of operations would provide rail service the length of the northeast waterfront, from Fort' Mason on the north to Mission Bay on the south, as well as providing, in the Ferry Building vicinity, a connection to the proposed F Line on Market Street. Since the E Line would utilize the same track as the proposed Muni Metro Extension, from its connection with the extension south of Mission Street to Fourth and Townsend, the Preferred Project element is defined as the trackage north from that connection point to the proposed terminal at Fort Mason. Since the design of the E Line will in large part be a function of The Embarcadero roadway design and there are many project-specific matters to be addressed in the commercial areas on the northern waterfront, there is not an Alternative in the FEIR which is preferred at this stage in the planning process. It is simply recommended that the E Line be further developed as a Preferred Project element and that the design, alignment, and related questions be further refined in the planning process.

It should be noted, however, that the E Line will provide a high level of transit service to the northeast waterfront area, and, in conjunction with the F Line, provide a unique quality of visual character to the waterfront. As the Municipal Railway intends to operate "vintage trolley vehicles" on the E and F Lines, it is clear that this service will not only be



important to those who will live and work along the waterfront corridor, but it will also provide an attractive means of transportation to the thousands of tourists who would be attracted not only to the destinations served but also to the trolley vehicles themselves.

### Other Projects

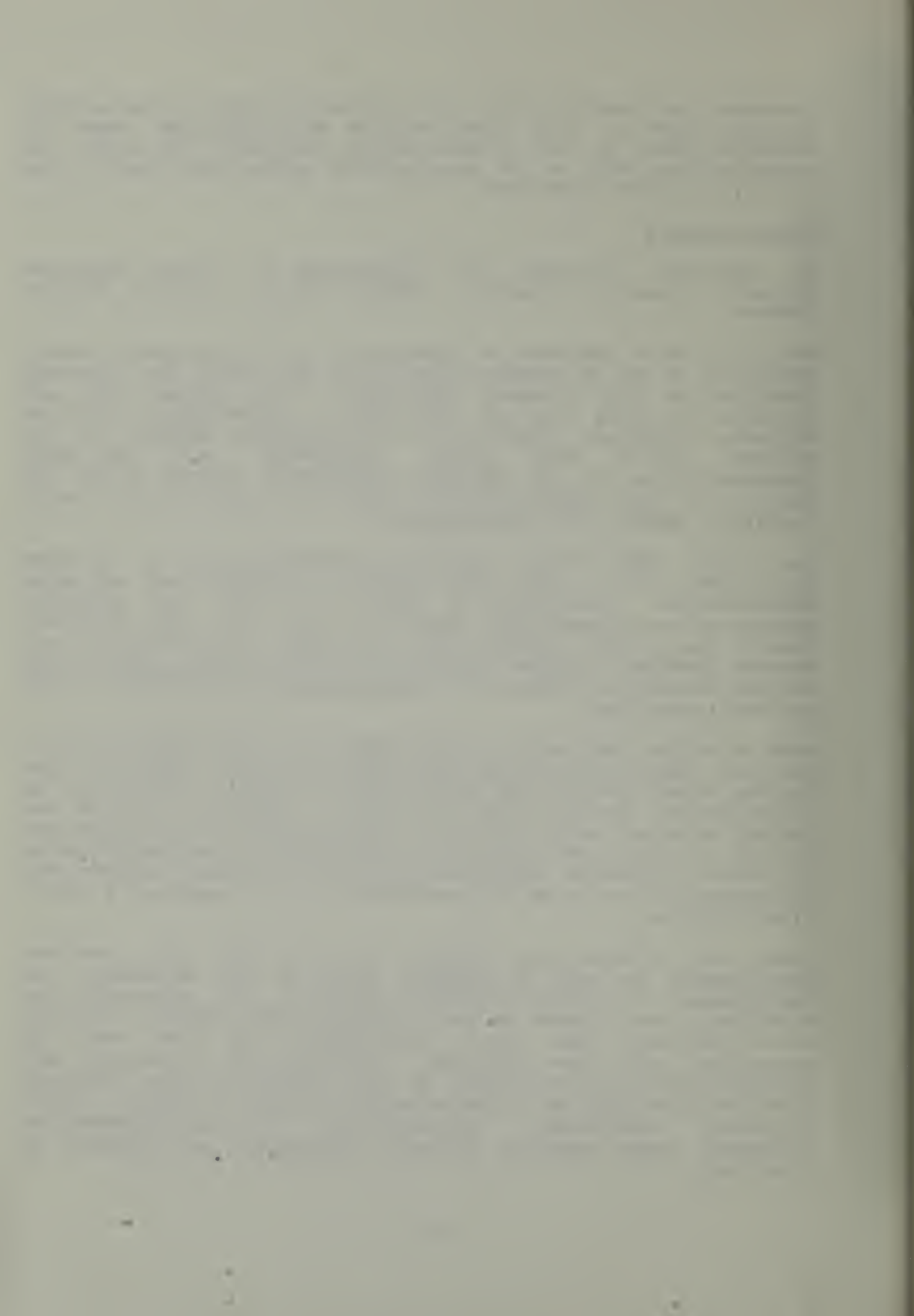
No additional projects are recommended as I-280 Preferred Projects elements. However, several other projects deserve comment.

The I-280 FEIR included an examination of the proposed subway extension of the SP commute train from the Fourth and Townsend location to the Transbay Terminal. This project is not incompatible with any of the City's recommended Preferred Projects. However, since it is an important subject in the pending SCR 74 MTC study, judgements and resultant recommendations on its further development should await the results of that study effort, which in terms of its scale certainly dwarfs the I-280 analysis.

The I-280 FEIR also included considerations of parking facilities. It is felt that parking considerations are more appropriately considered as part of land use planning procedures associated with specific areas, e.g., the downtown, Mission Bay, South Beach, etc., and must be related to the broader parking policies affected by the City for those areas and developments. Hence, no recommendation is offered on the parking facilities.

Some attention was paid in the I-280 EIR to the question of a new Muni facility to accommodate maintenance and storage of the trolley fleet needed for the E and F Lines. This need is recognized by the City staff, but since a specific location and project were not detailed in the I-280 study, no recommendation is made at this time. A facility proposal will be developed by the Public Utilities Commission staff on a schedule established in conjunction with the implementation of the proposed E and F Line projects.

Last, and although not studied in the I-280 EIR, possible improvements to the SP commute line on the Peninsula and improvements to the Transbay Terminal in downtown San Francisco, were listed on the original I-280 Concept Program. It is believed that these improvements are more logically associated with the regional transportation planning and decision-making on the future of rail service on the Peninsula than they are with the transportation investments in the City's northeast waterfront. Consequently, no recommendations regarding these possible project investments are offered at this time.





## RECOMMENDATION - PROJECT DEFINITION

Although there are a number of Preferred Project elements recommended for implementation, it should be apparent that in most cases it is difficult to separate the design, engineering, and functional relationships that exist between the various projects. For example, it is not reasonable to attempt to develop and implement a Muni Metro Extension project without at the same time integrating that design and engineering with the proposed Embarcadero roadway project in the southern part of the waterfront. Similarly, the removal of the Embarcadero Freeway and the accomplishment of replacement ramps must be designed and engineered in conjunction with local street modifications as well as The Embarcadero roadway design in the vicinity of the Ferry Building and to the north. Consequently, the question of project definition in the implementation phases which lie ahead needs to be addressed at this time, and must be reflected in the initial grant applications which will move the Preferred Projects toward implementation.

Considerable thought and discussion have been given to the question of project definition throughout the implementation phases of the I-280 effort, with respect to federal procedures. Additionally, attention has been given to the appropriate sequencing of projects in terms of construction phase, to insure minimum disruption to the transportation system and maximum coordination with other related planning activities. At this time, for purposes of the next step in the I-280 process, which is the preliminary engineering and NEPA work required by the federal government, it is recommended that the Preferred Projects be consolidated into two large projects, and implemented as such. Although these two projects are related in terms of their proximity, it is apparent from the I-280 FEIR that they can be accomplished independently from one another. Additionally, implementation of either of these proposed projects does not necessarily require the associated or subsequent implementation of the other, although, of course, that is the intention. The two projects are described as follows.

### I-280-Embarcadero South

It is proposed that the I-280 ramp resolution, the King-Berry corridor improvements, The Embarcadero roadway south, the Muni Metro Extension, and any related local street improvements, be undertaken as a single transportation project and moved forward into preliminary engineering. Moreover, it is recommended, as appropriate, that these projects be developed in close coordination with the San Francisco Redevelopment Agency's South Beach project and with the Santa Fe Southern Pacific Mission Bay project since the transportation and land use relationships in these areas are integral.



In the case of the South Beach Redevelopment project area, the Redevelopment Agency has been closely involved in the I-280 planning since its inception and has spent substantial time examining the relationship between the redevelopment planning and the I-280 transportation planning. As set forth in the I-280 EIR, the proposed functional requirements of The Embarcadero roadway in the South Beach area are fairly well established with respect to the number of moving lanes and the locations of intersections and turning movements. In fact, in this area of the waterfront, The Embarcadero roadway design was not modified in the various alternatives studied in the EIR.

Further refinement of this roadway design and examination of alternative alignments and treatments of the Muni Metro Extension and Beltline Railway would be considered in the preliminary engineering phase. Of course, as a practical matter, The Embarcadero roadway planning must be fully integrated with the transit line planning even if the Muni Metro Extension is implemented subsequent to the roadway project (that is, upon completion of the Muni turnaround project).

With respect to the I-280 ramp resolution and the King-Berry corridor improvements, as well as the continuation of the Muni Extension to the Fourth and Townsend location, the opportunity exists to closely coordinate the planning of these elements with the proposed Mission Bay project, as well as with the Embarcadero elements to the east and north. A further examination and refinement of the I-280 ramp modifications, and alternative treatments of the street and transit alignments and improvements through the King-Berry corridor would be the subject of the preliminary engineering phase of the project. These alternative treatments would be set forth in the EIS work, relying heavily upon the material prepared in the EIR. Also in this effort, the integration of any applicable conclusions regarding the location, extension, or modification of the SP commute facilities could be accomplished.

#### Embarcadero Freeway-Embarcadero North

It is proposed that the Embarcadero Freeway removal and replacement, The Embarcadero roadway north, the E Line, the F Line connection, the Muni Metro breakout siting, and related local street improvements, be undertaken as a single transportation project and moved forward into preliminary engineering.

This project would be the counterpart to the I-280-Embarcadero South project, encompassing the remainder of the I-280 Preferred Project elements. These projects would largely be associated with the removal of the Embarcadero Freeway, its replacement ramps, the related design of The Embarcadero





roadway, and the integration into that design of the proposed transit projects. Since the Muni Metro turnaround project is currently underway in terms of engineering and design, by the time the I-280 work proceeds, the location of the turnaround project should be established. Consequently, the location of the proposed surface breakout and Muni Metro Extension can be developed in relation to both the turnaround project and the Embarcadero Freeway-Embarcadero north project.

#### Alternative Definition - Important Note

It would be very advantageous if The Embarcadero roadway project between the vicinity of King Street and the Bay Bridge could be separated from the (proposed) I-280/Embarcadero South project, and initiated as an independent project. Doing so would likely mean a much earlier implementation of this roadway work, which is more consistent with the San Francisco Redevelopment Agency's schedule for implementation of the South Beach Redevelopment project. However, informal discussion with federal officials have not encouraged this project definition. Further discussions advocating this approach may yet yield a positive view of this project definition, and if this occurs, the I-280 elements would be initiated as three separate projects.



## RECOMMENDATION - FUNDING STRATEGY

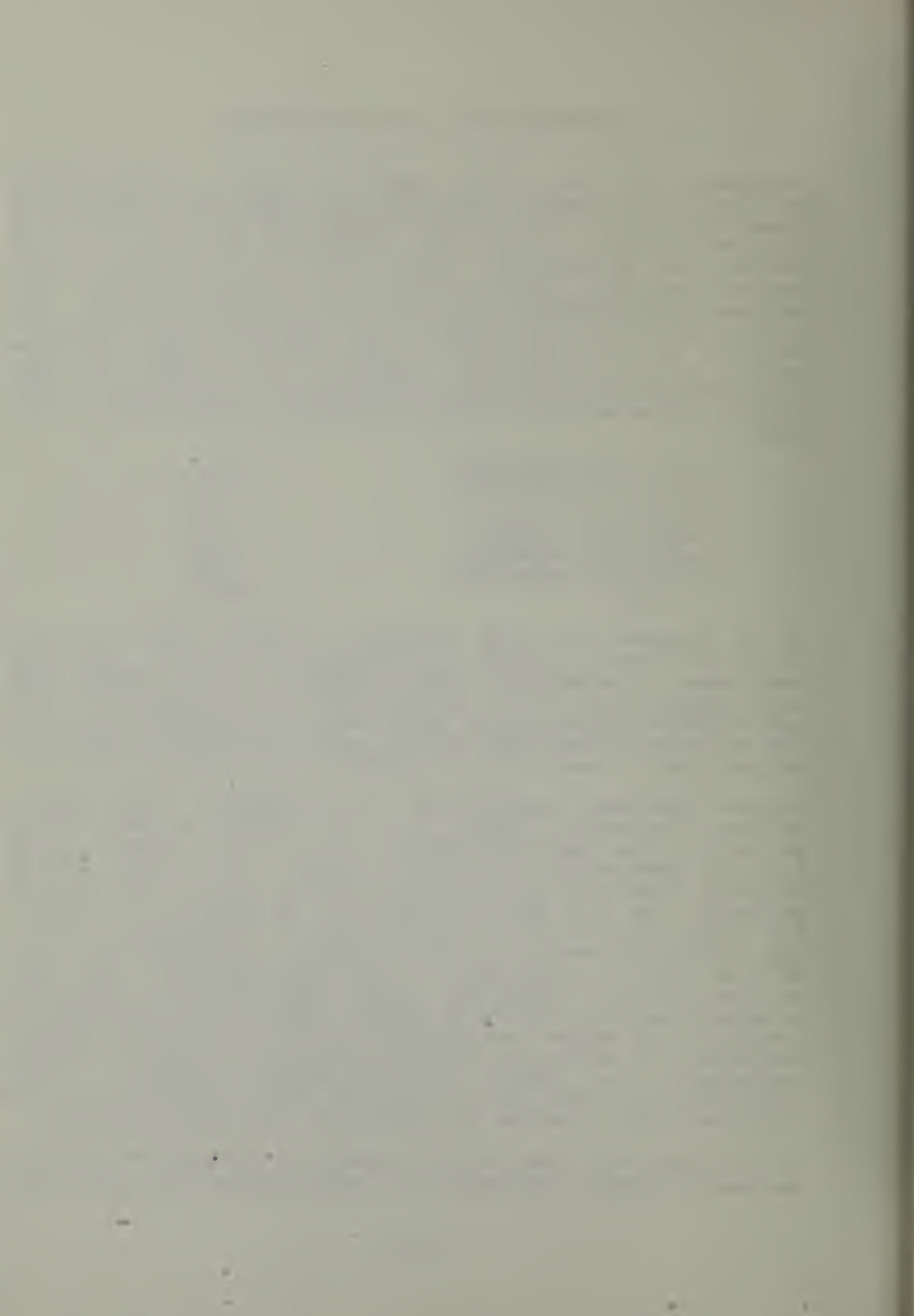
Withdrawal of the I-280 segment provides approximately \$87 million in federal assistance for substitute highway and transit projects. This federal assistance carries with it a requirement that a local match equal to 15% of the total project cost be provided. Thus, the total amount of project funding provided directly from the I-280 withdrawal and necessary local matching funds is more than \$100 million. Set against this is the estimated cost of the Preferred Projects as analyzed in the I-280 FEIR. The following cost estimates relate to the Preferred Projects as defined by this recommendation, and all cost estimates are in millions of 1985 dollars (inflated at 6% per year from the 1983 estimates in the EIR).

I-280 Ramp Resolution	\$24.2
Muni Metro Extension	9.2
E Line	22.1
Embarcadero Freeway	22.8
Embarcadero Roadway	46.8
Muni Metro Turnaround	46.0
TOTAL	<u>\$171.1</u>

It is apparent that the available federal funds from the withdrawal source, alone, will not provide the necessary assistance to accomplish these projects. This becomes even more apparent when it is realized that the federal funds are unaffected by any inflation in the cost of construction. Thus, the available buying power shrinks each year that the funds are not utilized if there is any increase in the construction cost.

Another important consideration is the somewhat unique nature of these withdrawal funds as they pertain to the highway projects on the Preferred Projects list. Unlike transit, there are not substantial alternative sources of capital funding available from the federal government for major local highway projects. The only current program at the FHWA is the Federal Aid Urban System (FAUS) program, and it provides an annual apportionment amount to San Francisco of approximately \$3 million which, in contrast to the requirements of the I-280 projects, is not significant. Hence, the Interstate withdrawal program provides a source of federal assistance which makes it possible to undertake relatively large-scale street and highway projects. Of course, the largest source of federal highway assistance, the Federal Aid Interstate program, is not available since that was the funding denied through the I-280 withdrawal and is limited to projects on Interstate highways.

In contrast, there are several currently available alternative sources of federal assistance for transit projects of relatively



major capital size. Discretionary funding for rail projects is available through the Section 3 program and additional capital funds are available from the Section 9 program. These sources, as well as others, have been used in the past by the Municipal Railway for major capital projects. Although the Reagan administration has proposed severe cutbacks in these programs, there is little indication at this time that the proposed reductions will be fully enacted.

Consequently, a funding strategy for the use of the I-280 withdrawal funds should rest upon the following two principles:

- o Highest priority for the use of the I-280 withdrawal funds should be the highway projects for which no other sources of funding (local or private) are available. Since there is no other substantial source of capital funding readily available for the highway elements, failure to use the Interstate withdrawal funds will likely mean that the highway elements of the I-280 Preferred Projects will not be built. Moreover, in the case of several of the major highway elements, the investment in the highway project represents a significant investment in the related transit project since the highway work will provide the right-of-way treatment for the related transit improvement.
- o Maximum use of the I-280 withdrawal funds should be placed upon projects which can be brought to construction early, rather than late, in the I-280 implementation process. While it may not be possible to program the expenditure of all of the I-280 funds in the relatively near future because of the lack of assurances that project elements which are staged for later years will find alternative funding sources, the loss of buying power on the withdrawal funds suggests that it is prudent to commit capital funds as early as possible.

Applying these two principles to the Preferred Projects list has assisted in the development of a proposed funding program for the I-280 funds. (This program is set forth on the following page.) Several points regarding this program deserve elaboration.

- o The Muni Metro Turnaround project, which has received \$1.1 million in I-280 funds, should seek UMTA Section 3 funding for all remaining project costs.
- o Funding for the removal of the Embarcadero Freeway should be provided by local resources, utilizing neither state or federal assistance, thus avoiding difficult problems regarding the question of funding eligibility of the removal.







# PROPOSED FUNDING

<u>PROJECT</u>	<u>TOTAL COST</u>	<u>I-280<sup>1,2</sup></u>	<u>INFLATION<sup>3</sup></u>	<u>SEC. 92</u>	<u>SEC. 32</u>	<u>LOCAL MATCH</u>	<u>OTHER</u>
MUNI LOOP	\$46.0	\$1.1	\$ -	\$ -	\$34.5	\$11.5	\$ -
MUNI E LINE	22.1	-	-	17.7	-	4.4	-
MUNI EXT.	9.2	7.8	9.6	-	-	1.4	-
I-280 RAMPS	24.2	16.2	19.8	-	-	2.9	4.2 <sup>4</sup>
							1.04
EMB. FWY.	22.8	10.8	13.2	-	-	1.9	10.25
EMB. RDWY.	<u>46.8</u>	<u>27.4</u>	<u>33.6</u>	<u>-</u>	<u>-</u>	<u>4.8</u>	<u>14.6<sup>4</sup></u>
TOTALS	\$171.1	\$62.2	\$76.2	\$17.7	\$34.5	\$26.9	\$30.0

NOTES: 1. Available from I-280: \$87.1 million in federal assistance.

2. Match Ratios: I-280 - 85%  
 Sec. 9 - 80%  
 Sec. 3 - 75%

3. Inflation is 7% for three years - represents minimum withdrawal funding needed.

4. Private Financing

5. Local Funding



- o Substantial capital costs associated with I-280 project elements in the proposed Mission Bay project area should be met by the Santa Fe Southern Pacific Company.
- o The MUNI E Line will likely be the last preferred project element implemented, due to necessary project sequencing. Thus, no I-280 funds are targeted for this project. However, the improvements to the Embarcadero will prepare the right-of-way for the rail line, thus substantially reducing the capital cost.

The proposed funding program attempts to combine a variety of federal, state, local, and private resources in a manner which maximizes the opportunity to implement the Preferred Projects. The requirement in the program for I-280 funding - a minimum of \$76.2 million - provides the foundation for the program. A contingency of \$10.9 million in I-280 funds is also established in the program.

The immediate decision is one of establishing an allocation of the I-280 funding in order that implementation steps may procede. The specific sources of local funding requirements need not be identified at this time, since a more detailed financial package can be assembled while the engineering work is underway.



## CONCLUSION

San Francisco is at an important stage in not simply thinking about, but acting upon, a significant series of actions affecting a very prominent area, its downtown waterfront. The re-ordering of land uses as set forth in the Northeast Waterfront Plan, the South Beach - Rincon Point Redevelopment Project, and the developing Mission Bay project, will dramatically alter the City's waterfront and adjacent areas for decades to come.

The I-280 study provides the study framework for decisions on important transportation investments which will support the land use changes envisioned. The I-280 withdrawal provides a substantial resource to begin accomplishing those investments. The City has before it the opportunity to take steps now which will substantially improve the transportation system along the waterfront and help facilitate the land use changes that will follow. It is to these purposes that the I-280 Concept Program Recommendation has been prepared.







